

CONSTRUCTION VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Contract ID 090320-702 Job No. J7P2165
County Bates Route 71 Original Bid Cost \$2,961,424.56
Contractor APAC-Missouri, Inc. By David Wilkins
Designed By APAC-Missouri, Inc. Phone 417-868-6700

VECP 09-65

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

The original design called for a 1.5" SP095C 70-22 over the mainline and 1.5" BP-2 over the shoulders. We propose to perform a 1/2" scratch mill over the mainline. This would allow for approximately 4,894.9 tons of SP095C, which was set up for irregularities, to be eliminated due to grade control provided by the scratch mill. In milling the roadway 1/2", we would also be able to thin the shoulders down from 1.5" BP-2 to 1" BP-2. This would eliminate approximately 4,613 tons of BP-2.

The scratch mill would generate rap off of the project, enough to place back into the SP095C 70-22 mix at 20%. This project was originally bid with 20% rap in the SP095C 70-22, however, we were going to have to haul the rap in from other locations. The cost of hauling this rap amounted to \$2.83/WET TON of the cost of the SP095C 70-22. Therefore, if we do not have to haul the rap in for this project, that savings can be realized in the V.E.

The 1/2" scratch mill would make this project eligible for profilograph bonus. This typical section would be identical to the one built on J7P0855 Rt. 54 St. Clair/Cedar Counties.

Note: No engineering fees were included in the above proposal. We are requesting that if any engineering is required, MoDOT perform the engineering at no cost to APAC-Missouri, Inc or this proposal. We are submitting this as a VE 50/50 split. APAC will accept no liability due to any DBE reduction as a result of this V.E. APAC to retain all asphalt bonuses/deducts and those bonuses/deducts will not be applied to the final 50/50 V.E. split. APAC to retain all asphalt millings.

The advantage of performing the scratch mill on this project is that it should provide a better product at a lower cost to the tax payers.

APAC-Missouri, Inc. does not foresee any disadvantages to the above proposal.

The estimated net savings is \$432,702.64.

2. Estimate of reduction in construction costs.
3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

APAC-Missouri, Inc. foresees no additional costs for MODOT.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

N/A
(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

August 20, 2009
(date)

No change to completion date or schedule.
(effect)

6. Dates of any previous or concurrent submission of the same proposal.

N/A
(date and/or dates)

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments:

Basis of final savings should be a result of final tonnages placed on project. I recommend using this proposal.

[Signature], P.E.

Submitted By Resident Engineer

8-11-09

Date

Comments:

Value Engineering Proposal. doc

☒ Approval
Recommended

☐ Rejection
Recommended

Becky Balty
District Engineer

8-12-09

Date

Comments:

APPROVED PER DISTRICT RECOMMENDATION.

☒ Approval

☐ Rejection

David D. Coates by JGH

State Construction and Materials Engineer

8-18-09

Date

Distribution: Resident Engineer, Project Manager, District Operations Engineer, State Construction and Materials Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102

Rt. 71 Bates County

Original Contract

Item Number	Item Description	Bid Quantity	Units	Unit Price	Total
10	BP-2 64-22	13980.2	TONS	\$51.50	\$719,980.30
20	SP095C 70-22	29165	TONS	\$64.85	\$1,891,350.25
				Total	\$2,611,330.55

VE Proposal

Item Number	Item Description	Bid Quantity	Units	Unit Price	Total
10	BP-2 64-22	9,367.20	TONS	\$51.50	\$482,410.80
XXX1	1/2" SCRATCH MILL*	285053	SY	\$0.67	\$190,985.51
XXX2	SP095C 70-22 w/ RAP from Scratch Mill****	24,270.10	TONS	\$62.02	\$1,505,231.60
				Total	\$2,178,627.91

Total Savings \$432,702.64

* 1/2" Scratch mill was figured by taking the entire mainline area, less established contract milling pay items quantity (Items 160 and 170) These milling items (Items 160 and 170) will be paid in addition to the scratch mill and not under-ran.

****SP095C bid with 20% rap and hauling rap from other locations. By milling rap off of project with scratch mill, we are able to eliminate the hauling of the rap and give the discount to MoDOT.

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☐ TCP/MOT
- ☒ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

_____ Use scratch-mill in lieu of planned level course for asphalt overlay.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

_____ Scan entire document.